

FCC Staff Estimates

Chart D10: Factor Shares of Total Payments

| Year | Labor Compensation | Materials Payment | Property Income /w Depreciation | Total Factor Payment | Labor Compensation Share | Materials Payment Share | Property Income /w Depreciation Share |
|------|-----------------------|----------------------|---------------------------------------|----------------------------|--------------------------------|-------------------------------|--|
| 1985 | 16,991,572,326 | 13,936,789,453 | 23,445,593,794 | 54,373,955,573 | 31.25% | 25.63% | 43.12% |
| 1986 | 16,728,435,454 | 14,103,648,147 | 26,792,578,943 | 57,624,662,544 | 29.03% | 24.48% | 46.49% |
| 1987 | 16,978,905,847 | 13,997,222,023 | 27,701,751,800 | 58,677,879,670 | 28.94% | 23.85% | 47.21% |
| 1988 | 17,030,359,791 | 16,131,842,209 | 26,866,209,000 | 60,028,411,000 | 28.37% | 26.87% | 44.76% |
| 1989 | 16,910,850,694 | 17,829,861,306 | 25,845,853,000 | 60,586,565,000 | 27.91% | 29.43% | 42.66% |
| 1990 | 17,586,868,921 | 18,026,360,079 | 25,584,541,000 | 61,197,770,000 | 28.74% | 29.46% | 41.81% |
| 1991 | 17,186,211,200 | 20,215,059,800 | 24,641,357,000 | 62,042,628,000 | 27.70% | 32.58% | 39.72% |
| 1992 | 17,160,988,000 | 19,714,755,000 | 26,477,135,000 | 63,352,878,000 | 27.09% | 31.12% | 41.79% |
| 1993 | 17,956,438,000 | 20,565,683,000 | 26,914,823,000 | 65,436,944,000 | 27.44% | 31.43% | 41.13% |
| 1994 | 17,154,284,000 | 23,694,521,000 | 26,366,385,000 | 67,215,190,000 | 25.52% | 35.25% | 39.23% |
| 1995 | 16,203,522,000 | 25,071,288,000 | 27,166,096,000 | 68,440,906,000 | 23.68% | 36.63% | 39.69% |

FCC Staff Estimates

Chart D11: Input Quantity Index

| Year | Shares | | | Quantities | | | Quantity Indices | | | | Growth |
|------|--------------|-----------|---------------------------|------------|----------------|---------|------------------|---------|-------------------------|-------------------|--------|
| | Labor | Materials | Property | Labor | Materials | Capital | Laspeyers | Paasche | Fisher | Fisher | |
| | Compensation | Payment | Income /w Depreciation | | | | A | B | Relative C=(A*B)^0.5 | Chain | |
| 1985 | 31.25% | 25.63% | 43.12% | 504,113 | 13,936,789,453 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | |
| 1986 | 29.03% | 24.48% | 46.49% | 482,698 | 13,816,310,326 | 1.05486 | 1.00816 | 1.00925 | 1.00871 | 1.00871 | 0.87% |
| 1987 | 28.94% | 23.85% | 47.21% | 477,714 | 13,519,006,111 | 1.10268 | 1.01281 | 1.01236 | 1.01259 | 1.02140 | 1.25% |
| 1988 | 28.37% | 26.87% | 44.76% | 466,827 | 15,233,555,068 | 1.13900 | 1.03921 | 1.03940 | 1.03930 | 1.06155 | 3.86% |
| 1989 | 27.91% | 29.43% | 42.66% | 461,149 | 16,230,415,414 | 1.18815 | 1.03345 | 1.03336 | 1.03340 | 1.09701 | 3.29% |
| 1990 | 28.74% | 29.46% | 41.81% | 443,105 | 15,765,836,293 | 1.21989 | 0.99205 | 0.99058 | 0.99132 | 1.08748 | -0.87% |
| 1991 | 27.70% | 32.58% | 39.72% | 414,457 | 17,288,093,619 | 1.25796 | 1.02291 | 1.02204 | 1.02247 | 1.11192 | 2.22% |
| 1992 | 27.09% | 31.12% | 41.79% | 411,167 | 16,514,721,412 | 1.29209 | 0.99400 | 0.99433 | 0.99417 | 1.10544 | -0.59% |
| 1993 | 27.44% | 31.43% | 41.13% | 395,639 | 17,056,843,079 | 1.32378 | 1.01023 | 1.00915 | 1.00969 | 1.11615 | 0.96% |
| 1994 | 25.52% | 35.25% | 39.23% | 367,196 | 19,197,642,055 | 1.35397 | 1.02910 | 1.02911 | 1.02910 | 1.14863 | 2.87% |
| 1995 | 23.68% | 36.63% | 39.69% | 346,843 | 19,836,681,477 | 1.37885 | 1.00480 | 1.00510 | 1.00495 | 1.15432 | 0.49% |
| | | | | | | | | | | Average [1986-94] | 1.54% |
| | | | | | | | | | | Average [1986-95] | 1.44% |

Chart D12: Input Price Index

| Year | Shares | | | Factor Price Indices | | | Input Price Indices | | | | Growth |
|------|--------------------|-------------------|------------------------------------|----------------------|-----------|---------|---------------------|---------|-----------------------------|-------------------|--------|
| | Labor Compensation | Materials Payment | Property Income /w Depreciation | Labor | Materials | Capital | Laspeyers | Paasche | Fisher Relative Chain | Fisher Chain | |
| 1984 | | | | | | | A | B | C=(A*B)^0.5 | | |
| 1985 | 31.25% | 25.63% | 43.12% | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | 1.00000 | |
| 1986 | 29.03% | 24.48% | 46.49% | 1.02819 | 1.02080 | 1.08333 | 1.05007 | 1.05120 | 1.05064 | 1.05064 | 4.94% |
| 1987 | 28.94% | 23.85% | 47.21% | 1.05447 | 1.03537 | 1.07151 | 1.00584 | 1.00539 | 1.00562 | 1.05654 | 0.56% |
| 1988 | 28.37% | 26.87% | 44.76% | 1.08234 | 1.05897 | 1.00605 | 0.98424 | 0.98442 | 0.98433 | 1.03998 | -1.58% |
| 1989 | 27.91% | 29.43% | 42.66% | 1.08797 | 1.09855 | 0.92781 | 0.97671 | 0.97663 | 0.97667 | 1.01572 | -2.36% |
| 1990 | 28.74% | 29.46% | 41.81% | 1.17754 | 1.14338 | 0.89453 | 1.01969 | 1.01818 | 1.01894 | 1.03496 | 1.88% |
| 1991 | 27.70% | 32.58% | 39.72% | 1.23025 | 1.16931 | 0.83548 | 0.99195 | 0.99110 | 0.99152 | 1.02618 | -0.85% |
| 1992 | 27.09% | 31.12% | 41.79% | 1.23828 | 1.19377 | 0.87401 | 1.02694 | 1.02728 | 1.02711 | 1.05400 | 2.67% |
| 1993 | 27.44% | 31.43% | 41.13% | 1.34653 | 1.20571 | 0.86719 | 1.02353 | 1.02243 | 1.02298 | 1.07823 | 2.27% |
| 1994 | 25.52% | 35.25% | 39.23% | 1.38602 | 1.23424 | 0.83058 | 0.99812 | 0.99813 | 0.99812 | 1.07620 | -0.19% |
| 1995 | 23.68% | 36.63% | 39.69% | 1.38602 | 1.26389 | 0.84033 | 1.01307 | 1.01337 | 1.01322 | 1.09044 | 1.31% |
| | | | | | | | | | | Average [1986-94] | 0.82% |
| | | | | | | | | | | Average [1986-95] | 0.87% |

Statement of Commissioner James H. Quello

**RE: FEDERAL-STATE JOINT BOARD ON UNIVERSAL SERVICE
(CC Docket No. 96-45),**

ACCESS CHARGE REFORM (CC Docket No. 96-262), and

**PRICE CAP PERFORMANCE REVIEW FOR LOCAL EXCHANGE
CARRIERS (CC Docket No. 94-1).**

Today, the Commission has established rules to implement the Universal Service provisions of the Telecommunications Act of 1996, as well as rules to restructure the access charge system while also initiating reductions in the levels of those access charges. I have believed throughout my participation in the debates regarding universal service and access reform that, as much as possible, we should seek to ensure that consumers experience the benefits of our actions. To this same end, we should try to avoid the possibility that total bills for groups of consumers could increase as a result of implementing new universal service programs and moving into a new access charge regime.

Universal Service

This Commission now has taken steps to establish processes for the administration of universal service funds in a way that allows the commitments represented in this section of the 1996 Telecommunications Act to be fulfilled. We have labored to develop a reasonable plan that will provide necessary and sufficient funds for schools and libraries as well as other universal service programs. We also have sought to avoid collection of funds beyond those legitimately needed to help make new and important services available to students and teachers in inner city, suburban and rural schools from Takoma Park, D.C., to Tacoma, Washington, from McAllen, Texas to Mackinac Island on the Upper Peninsula of Michigan.

We have achieved this balance by establishing funding necessary to begin the program at a reasonable level, with a provision that allows schools and libraries to begin the program January 1, 1998. By this time, we would hope that participating groups will have had the opportunity to develop their plans. Our decision to start the program with lower funding in the first six months, increasing in the following years, gives the program early constraint, with flexibility at later periods when greater demand is likely to develop. As a result, I believe this decision provides for new universal service funding within the limits of what consumers around the country are willing to pay.

The issue of what consumers are prepared to pay has been a very difficult one. The need for our attention to the issue, however, has been clearly expressed in many ways. It has required the Commission to balance the need for programs involved in universal service that are critically

important to the future of this country with their cost. In this respect, this universal service proceeding is one of the most important decisions in this agency's history. At the same time, we have heard a consistent message from around the country that consumers and businesses are not necessarily willing to pay for these services through higher total bills for telecommunications services.

With respect to funding for health care subsidies, we have endeavored to make sure that rural, non-profit health care facilities have sufficient funding to meet the needs for providing services in communities that otherwise might not have the same resources that are available in urban communities.

There also are many other policy and market issues that will need to be resolved in a new universal service environment. For instance, I believe it remains to be seen how cable and wireless industries will continue to develop to play a greater role in the telecommunications services that will meet future universal service needs. As these developments occur, the Commission may continue to monitor the equity of contribution and recovery of universal service funds by paging services as well as the extent to which wireless services in general should contribute for intrastate services.

Access Reform

The Commission's actions today on access reform involve two components: (1) several structural changes that will cause access components to move to more reasonable categories and to become subject to competition where possible; and (2) reductions in the current level of access charges, largely accomplished through revision of the productivity and sharing mechanism in LEC price caps.

Where this decision changes the structure of end user charges, as in our treatment of business and residential customers, and consumers with second or multiple lines, I believe our decisions should be – and are – characterized by balance. As a result of this necessary reform of the access payment structure, charges should remain within reasonable bounds and should help to promote the development of competition and consumer benefits.

I also believe this Commission would be remiss in our regulatory duties to the American public and responsibilities to our licensees if we were to restructure universal service without concurrently engaging in access charge reform. We have talked about this step for quite some time. Many parties have expressed their views in a very public fashion as to whether or not this step is warranted, or to what degree access charges should be reduced. I believe that this step to restructure and reduce the level of access charges is the right thing to do and this is the right time to do it.

The consumers and users of telecommunications services are the intended beneficiaries of today's actions regarding access reform. Now that these decisions are adopted, I believe it will become clear that we have done our best to ensure that consumers do not bear the burden of

implementing the new universal service program and access charge reform. Our actions also represent a fundamental part of the Commission's effort to facilitate competition in the local exchange marketplace, in this case by reducing access charges paid to LECs by interexchange carriers.

The primary vehicle for this reduction is the decision to change the existing combinations of productivity factors, or "x-factors", and sharing options to a single productivity factor of 6.5% accompanied by no sharing obligation. As a result, this decision continues the Commission's efforts to move away from the lingering remnants of rate of return regulation for local exchange carriers. Today's decision will complete the movement of price cap LECs away from the sharing obligations that were part of the past system.

Looking to the Future

I want to emphasize that today's actions represent a first step in many respects.

Concerning universal service, this is not a day to declare victory. There is much left to be done by the Commission, the states, temporary and permanent fund administrators, school districts, libraries, health care facilities, parties developing cost models, and telecommunications companies seeking to provide services and enter new markets. This is definitely an important day, but the real effort is just beginning. That effort will require investment, planning, training in using services, and community, professional, and corporate involvement, and it will only be successful after the continuing involvement, in community after community, by the many parties who have so diligently participated in this proceeding.

The Commission's action to increase the productivity factor not only results in reduced access charges in the first year, but also in further reductions in access charges in subsequent years. In another respect, it may very well become necessary very soon for the Commission to consider how to supplement today's decision to allow for pricing flexibility by LECs as competition develops to a greater level in the local marketplace. One possible way to provide that flexibility might be through relaxing the 6.5% productivity factor where LECs can meet criteria to demonstrate sufficient competition.

At the same time, later steps might also include the potential for checks and balances in the event that competition in the local exchange marketplace does not develop as soon as some seem to expect. Once again, down the road the Commission may need to consider more specific measures to ensure that the platforms necessary for competition truly are available. It is my hope that those steps won't be necessary.

Finally, some parties have warned recently that any actions by this Commission to lower access charges may cause LECs to seek to raise local phone rates. That matter will become an issue for state commissions, and it is my hope that they will respond to any efforts to raise local rates by ensuring that consumers ultimately benefit from federal and state actions to implement the Telecommunications Act of 1996 and any related decisions.

**Separate Statement
of
Commissioner Susan Ness**

Re: Universal Service; Access Reform; Price Cap Review

Today we reach another milestone in our efforts to secure for consumers the myriad benefits made possible by the Telecommunications Act of 1996. We are steadfastly fulfilling the tasks assigned to us by Congress in a manner that will prove the wisdom -- and realize the vision -- of this landmark legislation.

Our pursuit has many facets. We must eliminate impediments to competition, ensure fair rules of engagement for all market participants, safeguard the interests of residential consumers, especially those with limited incomes and those in high cost areas, promote economic efficiency, and lower prices to consumers. Today's orders represent substantial progress on all these fronts.

Much of what we are doing is driven by law and by economics. But the results of our decisions have a human face:

Will a poor family in Appalachia be able to summon the police or fire department in an emergency?

Will a critically ill patient in a remote region of Montana have her tumor quickly and accurately diagnosed?

Will a curious high-school freshman have an opportunity to view Thomas Jefferson's valedictory letter, in his own aged but still powerful hand?

Will an elderly widow be less hesitant to break her loneliness with longer and more frequent calls to her great-grandchildren?

Today brings us closer to a day when these questions can all be answered "yes."

Fifteen months after enactment of the Telecommunications Act, the transition to a new industry paradigm remains far from complete. The road is not straight, or smooth, or free from peril. But a steady course -- and a shared determination -- can bring us to the desired destination.

We still have far to travel to resolve issues of support for high-cost areas. I believe we have a sound plan and a clear timetable for implementation, but we still face two main

obstacles. The proxy models, already impressive feats of cost engineering, still require further refinement before they can reliably be used to target federal cost support. And a new consensus must be achieved before support essential to maintain affordable telephone service in high-cost states can be drawn from states with lesser need, as I believe the Congress of the United States clearly intended. In the meantime, we can make only incremental changes in the implicit subsidies that currently support the high-cost services provided by large price cap telephone companies.

For the smaller rural companies, change will come even more gradually. This is consistent with Congress's expectation that competition would arrive more quickly in the cities and the suburbs. In the interim, we recognize that rural economies must not face unnecessary dislocations.

The need to avoid harmful dislocations, while also encouraging beneficial change, is crucial to much of what we are doing in the access reform and price cap orders. We are implementing many changes that will help to ensure an orderly transition from monopoly to fair and efficient competition.

In particular, the recovery of more costs through flat-rated charges instead of usage-sensitive charges will reduce the exposure of incumbent telephone companies to "cherry-picking" by new entrants, even as they also expand the range of customers likely to be offered competitive alternatives. Completion of the conversion to a three-part rate structure for tandem-switched transport will eliminate a historical artifact, but allow time for affected carriers to adjust. The new X-factor more accurately reflects the productivity gains that can reasonably be expected from price cap carriers, while avoiding radical reduction of telephone company access revenues and proposals that would have unfairly penalized those companies that have most assiduously conducted themselves in accordance with the incentives we deliberately created.

We prefer to rely on marketplace forces rather than regulation to drive investment decisions and price reductions. Some will fault us for not acting more aggressively; others will complain that we are too heavy-handed. My own view is that each decision, and all of the many issues in these orders, has been approached with balance and sensitivity, fairness and principle.

Not everyone will be satisfied. But no one can say that we have not read the law, considered economic theories and business realities, consulted our consciences, and sought to achieve as much fairness as is humanly possible.

I readily confess that I cannot muster the same passion for restructuring the arcane and impenetrable Transport Interconnection Charge as for devising a completely new regime to provide discounts for schools and libraries to access telecommunications and information services. Though I am fully committed to full realization of all of the universal service provisions, the Snowe-Rockefeller-Exon-Kerry provisions reflect an especially bold vision.

For our part, we have used our creativity to harness the magic of competition to reduce the costs of the support program, created incentives to ensure only prudent use of supported services, targeted discounts to minimize the danger of a widening gap between information haves and have-nots, and sought at every turn to maintain our commitment to competitive neutrality.

Even more important, we have sought to leave crucial decisions in the hands of educators and librarians, scattered throughout the country, rather than in the hands of Washington-based administrators. And, best of all, we have arranged a smooth take-off that will avoid creating unsustainable financial burdens on carriers and consumers, allowing competition and growth and declining prices -- rather than rate increases -- to supply the necessary funds.

In this area, as in the others addressed by today's orders, we have applied all our energy, and all our skill, to make the best decisions, based on our current knowledge and the law. A continuing commitment to constructive dialogue by all interested parties -- telephone companies, long distance companies, wireless companies, small businesses, large businesses, residential consumers, state regulators, and members of Congress -- is critical to continued progress. At the end of the day, fairness to all parties and demonstrable benefits to consumers are the standards by which we will all be judged.

SEPARATE STATEMENT OF
COMMISSIONER RACHELLE B. CHONG

Re: Price Caps Performance Review for Local Exchange Carriers, Fourth Report and Order, CC Docket 94-1.

Along with the *Access Charge Reform* and *Universal Service* orders, today's *Price Caps* decision adopts much-needed reforms which I believe to be very important to the progressive deregulation of incumbent LECs as competition increases. I write separately to express my strong support for this item, and to highlight some of the key aspects of the decision.

In this decade, price cap regulation has been an effective tool to ensure that rates are just, reasonable and not unduly discriminatory. Price caps will continue to keep access charges in check as we transition towards an access charge regime based on forward-looking economic costs. As competition develops, however, we will gradually deregulate incumbent LEC interstate access services by removing services from price caps where actual competition has arisen.

The price cap plan we adopt today contains a challenging unitary X-factor of 6.5 percent annually. While picking an X-factor is not an exercise that brings one to a state of metaphysical certitude, I feel confident that the X-factor we have chosen is a reasonable one and well-supported by the record. We have selected this X-factor after very careful analysis of the growth rate of incumbent LEC total factor productivity (TFP) and the rate of change of LEC input prices. I believe the new X-factor of 6.5 will be a more reliable measure of incumbent LEC potential productivity gains than our interim price cap plan, which offered three X-factors, some with sharing obligations. In the unlikely event we have made the X-factor too challenging for some LECs, we retain our low end adjustment mechanism. I view this mechanism as a wise safety net.

To ensure that consumers share in LEC efficiency increases, we have added a 0.5 Consumer Productivity Dividend (CPD) to the X-factor. I recognize that some have argued that the CPD was initially adopted as a way to flow through the first benefits of the price cap plan to access charge customers, and that it may be time to bid the CPD a fond farewell. Given the current state of competition in most price cap LEC markets, we have decided to continue use of the CPD as a way to ensure that productivity gains realized by the LEC will be shared between ratepayers and shareholders. In the future, however, a Commission may decide that competition has progressed to the stage where a CPD mechanism could be safely discarded because market forces will provide consumers with the benefit of the LEC's productivity.

Finally, I am particularly pleased that this Report and Order puts a stake through the

heart of "sharing," the requirement that incumbent LECs earning more than specified rates-of-return must "share" half or all of the amount above those rates-of-return with their access customers in the form of lower rates the following year. Since sharing continues the inefficiencies of a rate-of-return era, I have long believed that a system of pure price caps without sharing would be preferable.¹ I believe that we have correctly found today that sharing tends to blunt the efficiency incentives we sought to create through the price cap plan.

¹ See, e.g., *In the Matter of Price Cap Performance Review for Local Exchange Carriers*, Separate Statement of Commissioner Rachelle B. Chong, First Report and Order, 10 FCC Rcd 8961, 9251 (1995).